## THIRTEENTH

## LETTER

TO SIR JOSEPH BANKS Baronet

President of the Royal Society,

ONTHE

Subject of Cochineal Infects, discovered at Madras,

## By JAMES ANDERSONM. D.

With a Copper Plate Engraving Annexed, of the different INSECTS mentioned in the Letters, from the Drawings of BARON REICHEL.

Also an Engraving of the Opuntia Major Spinulis obtusts mollibus, & innocentibus, and the Plan of a Nopalry in the Bishoprick of Guaxaca in the Kingdom of Mexico, Extracted from the Second Volume of SIR HANS SLOANE'S HISTORY OF JAMAICA, for the use of Country Gentlemen who may be disposed to make Plantations, and are not in possession of that Work.

Vellera mutentur, Tyrios incocta Rubores.
Virg. Geor. Lib. 3.

MADRAS: Printed by CHARLES FORD.

MDCCLXXXVII.

## To SIR JOSEPH BANKS Baronet, Prefident of the ROYAL SOCIETY.

DEAR SIR,

GALE of wind from the West, attended with incessant heavy Rain during the 10th and 11th Ultimo, having cradicated many Trees here, has left my Cochineal Plantation rather in a shortered state, but the destruction of Opuntia Plants gives me less concern being satisfied how much soever the Thorns are reduced, no cultivation, will make the kind we have here, produce Fruit with red jucies, without which no improvement can be made in the colour of the Insects.

Colonel Kyp has taken much pains to fearch for a Cactus with red juices in Bengal as yet without fuccess, and as any use which could be made of the Insects, beyond their description and Natural History, must necessarily be the work of many Persons, I have made it a Rule to declare whatever proves abortive in the Culture, as well as what success may attend every Experiment; Want of attention in this particular, is no doubt the reason the rest of the World have fallen so far short of the Guaxacans in the Culture of Cochineal, which is so nice a matter, that the Spainards who have been Masters of the Country near 300 Years, are to this day very little acquainted with any thing of it more than its Value, and I have been assured by Gentlemen who have been many Years there, that one Village will sometimes, by greater attention and care produce Cochineal of a finer Quality than another.

Our want of success hitherto is no proof of the Culture being impracticable, nor can it be supposed Nature is so bounded as not to afford other Plants besides the Castus fit to nourish these Insects with the most proper food, in this as well as any other Country; A delicious Fruit here named Tummuley by the Tamuls bids fair, and I have directed some of the Shrubs on which it grows in the Woods to be dug up by the roots and Planted in my Garden, as the Fruit is throughout of a beautiful Ruby or Pigeons blood colour, staining the hands and lips of those who eat it.

A few days ago I found a Motchey Tree in my Garden so stocked with Cochineal Insects, that the Leaves were stinted in their growth and crumpled together; this must be the Insect mentioned by Mr. Turing at Masulipatam, and is the same I had seen on the Robinia Mitis and Ficus Maximal.

As these Insects are in clusters covered with a Cottony or Wooly Silk, I have specified them by the name Erion—The Insect of the Vitis Vinifera and Galega Prostrata on account of it's small Size Microsgenes, and that of the Solanum Melongena being in a Cylindrical Case of Silk Koleos, in Roman Letters, for want of a Greek Type.

All the Infects I have described are Silk Worms, and having taken it on myself to amend this part of Natural History by Specific Names Characteristic of each Insect: they appear in review as sollows,





- 16, The CHLOEOON, found on the Gramen muticum pratenfe.
- 2d, The COCCUS OOGENES, on the Phyllanthus Emblica, Parietaria Indica, Menispermum Cordifolium and Malva Arborea.
- 3d, The COCCUS TRICHODES, on the Psidium Guajava, Annona Squamosa, Solanums Lycopersicon, Hybiscus Rosa Sinensis, and Phaseoli.
  - 4th, The COCCUS ERION, on the Robinia Mitis, Ficus Maximus and Motchey Tree.
  - 5th, The COCCUS MICROOGENES, on the Vitis Vinifera and Galega Prostrata.
  - 6th, The COCCUS KOLEOS, on the Solanum Melongena.
  - Mr. Buck Surgeon of the RAVENSWORTH, will deliver you half a Pound of the Chloronia

Fort St. George Dec. 18th 1787. I am with much Esteem,
Dear Sir,
Your very Obedient
Humble Servant
JAMES ANDERSON,

